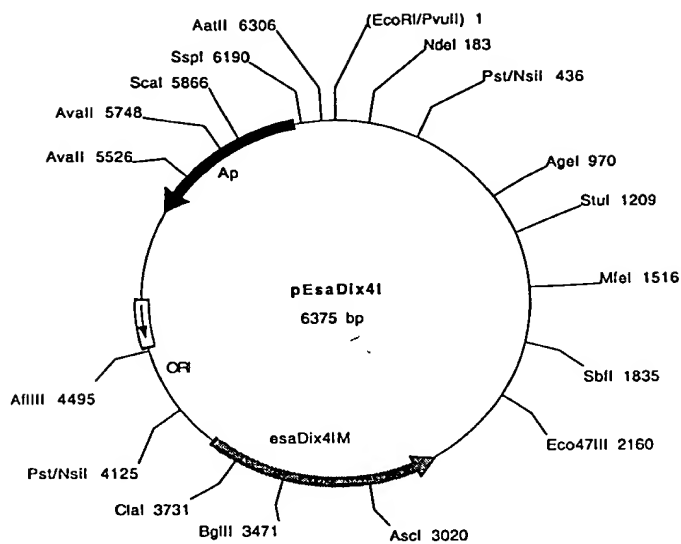


Fig. 1

BEST AVAILABLE COPY

A.



B.

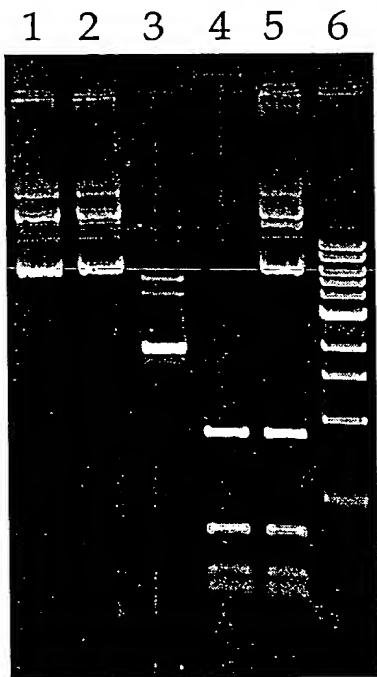
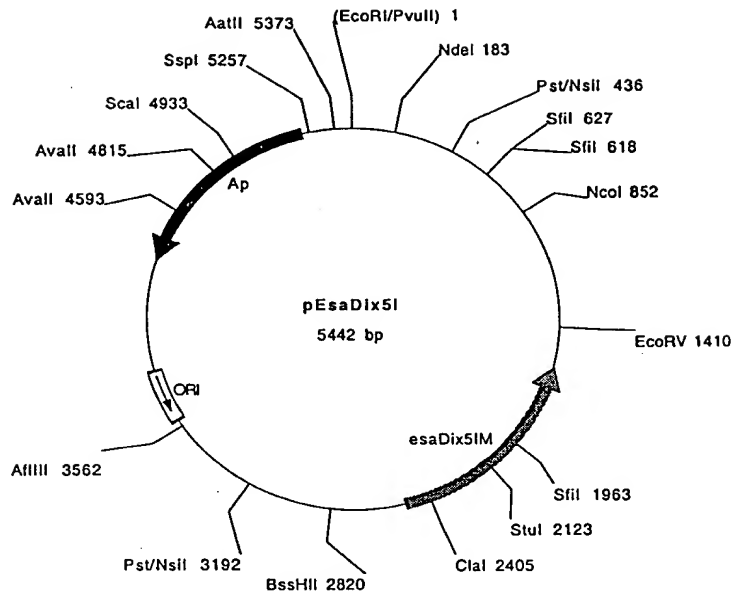


Fig 2

A.



B.

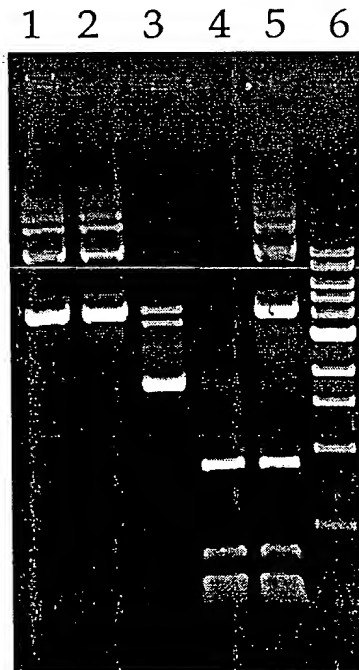


Fig. 3.

nucl M

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V E A D N L D F I Q T L P D A
91 AGCTTCCGAATGATCTACATCGATCCGCCGTTCAACACAGGGCGA
S F R M I Y I D P P F N T G R
136 ACGCAGCGGCTTCAGTCGCTCAAGACGACCCGCTCGGTACAGGG
T Q R L Q S L K T T R S V T G
181 TCGCGAGTCGGCTTCAAAGGCCAGACGTACGACACGGTCAAGAGC
S R V G F K G Q T Y D T V K S
226 ACTCTGCACTCGTATGACGACGCTTTCACCGACTATTGGTCGTTT
T L H S Y D D A F T D Y W S F
271 CTCGAACCGCGTCTCCTGGAGGCTTGGCGGTTGCTACCCCTGAC
L E P R L L E A W R L L T P D
316 GCGCGCTCTATCTTCATCTGGATTACCGCGAGGTTCACTACGCC
G A L Y L H L D Y R E V H Y A
361 AAGGTCGTCTCGACGCGATGTTCCGACGCGAAAGCTTCCTGAAC
K V V L D A M F G R E S F L N
406 GAGCTGATCTGGGCGTACGACTACGGCGCGCGCTCGAAGAGCAAG
E L I W A Y D Y G A R S K S K
451 TGGCCACCAAGCACGACAACATCCTCGTGTATGTGAAGGACCCG
W P T K H D N I L V Y V K D P
496 AACAACTACGTCTGGAACGGTCAGGATGTAGATCGCGAGCCCTAC
N N Y V W N G Q D V D R E P Y
541 ATGGCGCCCGGGCTCGTTACACCCGAGAAGGTAGCGCTTGGCAAG
M A P G L V T P E K V A L G K
586 CTGCCCACCGACGTCTGGTGGCACACAATCGTTCCGCCTGCGAGC
L P T D V W W H T I V P P A S
631 AAAGAGCGCACCGGGTACGCGACACAGAAGCCGGTCGGCATCATC
K E R T G Y A T Q K P V G I I
676 CGTCGCATGATTACGGCGAGCAGCAATGAAGGCGACTGGGTTCTG
R R M I Q A S S N E G D W V L
721 GATTTCCTCGCTGGTAGTGGGACGACCGCGCCGCGCCCGCCAG
D F F A G S G T T G A A A R Q
766 CTCGGACGCCGTTTTGTGCTCGTAGACGTCAACCCAGAAGCAATC
L G R R F V L V D V N P E A I
811 GCGGTAATGGCAAAACGGTTGGATGACGGGGCATTGGACACCAGC
A V M A K R L D D G A L D T S
856 GTGACGATCGTGCACTCCCCAGAGTGACCCACGAACCGACGGA
V T I V Q T P Q S D P R T D G
901 TGA 903

SEQ. ID NO: 1
SEQ. ID NO: 2

Fig. 4.

esa Dix 4IM

SEQ ID NO 3
SEQ ID NO 4

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A T S L H L E S V V T E G A E
91 TCACCGCCTAATCGTCTGATTGGGCGGACAACCTGCCGCTAATG
S P P N R L I W A D N L P L M
136 GTAGATTTGTTGGCCGAATATGAAGGGAATTCGATCTGATCTAC
V D L L A E Y E G K I D L I Y
181 GCCGATCCCCCTTTTTTACGGATCGTACTTATGCGGCGCGAATT
A D P P F F T D R T Y A A R I
226 GGTATGAGGGAGGATTTCGCGTCCGTCACAACTGGCAGCTTGCA
G H G E D S R R P Q T W Q L A
271 GAAGGATATACGACGAGTGAAGGATTTAGATGAATACCTGGAC
E G Y T D E W K D L D E Y L D
316 TTCCTTTATCCACGCCTGGTACTGATGTATCGACTGCTGGCACCA
F L Y P R L V L M Y R L L A P
361 CACGGAACGCTCTACTTGCACCTGGACTGGCAGCCAATGCCTAC
H G T L Y L H L D W H A N A Y
406 GTACGTGTACTGCTTGATGAGATCTTCGGGCGACAGCGTTTCTC
V R V L L D E I F G R Q R F L
451 AACGAGATCGTCTGGATCTATCACGGCCCTCAGCCATCCGACGC
N E I V W I Y H G P S A I R R
496 GCCTTCAAGCGCAAACATGATACCATCTTGGTTTATGTGAAAGGT
A F K R K H D T I L V Y V K G
541 GAAACTATACATTCAATGCGGATGCGGTTTCGTCAACCTTACCAT
E N Y T F N A D A V R Q P Y H
586 CCGAGCACNCATAAGACCTTCGCTTCCTCCCCGAAGGCCGCTTT
P S T H K T F A S S P K A G F
631 GGTAAGGTGCCGGATCTGCAGCGCGGCAAAGTGCCGAAGACTGG
G K V P D L Q R G K V P E D W
676 TGGTATTTCCGGTCGTGGCCCGTCTACACCGAGAACGGAGCGGC
W Y F P V V A R L H R E R S G
721 TATCCGACTCAAAAGCCTCAAGCCTTGCTGGAGCGGATCCTGCTG
Y P T Q K P Q A L L E R I L L
766 GCCTCCTCGAACGCGAGGCGATCTGGTGGCAGACTTCTTCTGCGGC
A S S N A G D L V A D F F C G
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856 CTGGTCAACGATGCAAGCTGGCGCGCCGTTTCATGTGACACGCACA
L V N D A S W R A V H V T R T
901 CGCTTGCTACGCGAGGGAGTAAGTTTCACTTTTGAACGCCAGGAA
R L L R E G V S F T F E R Q E
946 ACTTTTACTCTACCTATCCAGCCACTTCCACCAGATTGGTTGATC
T F T L P I Q P L P P D W L I
991 ATCGCCGAGGAGCAGATTTCGCTCCAAGCACCCCTTTCTCGTAGAT
I A E E Q I R L Q A P F L V D
1036 TTTTGGGAAGTGGACGATCAATGGGATGGCAAAATCTTCCGCAGC
F W E V D D Q W D G K I F R S
1081 CGTCATCAAGGCTTACGCTCCCGCCTTCAGGAGCAGGCGCCGCTC
R H Q G L R S R L Q E Q A P L
1126 TCTCTACCATTGACCGGAATGGACTGTTGTGTGTACGGGTAGTG
S L P L T G N G L L C V R V V
1171 AGCCGTGAAGGGGAATACTATGAGTTCACAGGTCGAGCCGATAGC
S R E G E Y Y E F T G R A D S
1216 CCTCACCCCGTATCGTTTTGA 1236
P H P V S F *

Fig. 5

es9 Dix SIM

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F A D N M E V L R G L P A A S
91 GTGGACCTGATCTACATCGATCCTCCGTTCAACACCGGAAAGGTT
V D L I Y I D P P F N T G K V
136 CAGGAGCGCACTCAGCTCAAACGGTGCCTCCGAGTGGGGCGAT
Q E R T Q L K T V R S E W G D
181 CGCGTCGGATTCCAGGGCCGTCGCTACGAAAGCATCGTCGTGGGT
R V G F Q G R R Y E S I V V G
226 AAGAAGCGCTTTACCGACTTCTTCGACGACTATCTGGCTTCTCTG
K K R F T D F F D D Y L A F L
271 GAACCGCGCCTGGTGAAGCCATCGTGTCTGGCGCCGACGGG
E P R L V E A H R V L A P H G
316 TGCCTCTACTTTCACGTCGACTACCGCGAGGTGCACTACTGTAAG
C L Y F H V D Y R E V H Y C K
361 GTCCTTCTTGACGGCATCTTCGGTCGCGAGGCCTTTCTCAACGAG
V L L D G I F G R E A F L N E
406 ATCATCTGGGCCTACGATTACGGCGGGCGTCCGAAGGACAGGTGG
I I W A Y D Y G G R P K D R W
451 CCTCCTAAGCAGACAACATCCTGCTCTACGCCAAGACTCCCGGT
P P K H D N I L L Y A K T P G
496 CGCCACGTGTTCAATGCGGACGAAATCGAGCGCATTCCTTACATG
R H V F N A D E I E R I P Y M
541 GCTCCGGGCGTGGTGGCCCCGAAAAGGCAGCCCGTGGAAAAGT
A P G L V G P E K A A R G K L
586 CCAACCGACACGTGGTGGCATAACGATCGTTCCGACCAGCGGCTCC
P T D T W W H T I V P T S G S
631 GAGAAGACCGGGTATCCAACCCAGAAACCTTTAGGGATTCTCCGC
E K T G Y P T Q K P L G I L R
676 CGTATTGTGCAGGCATCGTCTCATCCGGGGGCGAGTCGTGCTCGAC
R I V Q A S S H P G A V V L D
721 TTCTTCGCCGGCAGTGGGACAACAGGGGTAGCGGCTTTTGAGTTG
F F A G S G T T G V A A F E L
766 GGCCGGCGTTCATTCTGGTCGATAACCATCCGGAGGCCCTCCAG
G R R F I L V D N H P E A L Q
811 GTGATGGCCAGGCGCTTCGACGGCATCGAGGGGATCGAATGGGTG
V M A R R F D G I E G I E W V
856 GGCTTCGATCCGACACCGTACCAGAAGGGCGCAAAGCAGCGCCGC
G F D P T P Y Q K G A K Q R R
901 TCCTGCCCGGCGCCACCGGGTAA 924
S C P A P T G *

Fig. 6

nuc1R

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M T H E P T D D P D F I V M A
46 GCGAGCGCGGCGAACCTCGCTGATCGGTACGTAGCGAGTGAAGAC
A S A A N L A D R Y V A S E D
91 GACCCCTGGGTCGGCAGCCCGTTCGAGTGGATCCTTCGCGTTCCA
D P W V G S P F E W I L R V P
136 TCCAGAACGAAGGGCGCGTTCGGTGAGCTGCTCGTGAGCGAATGG
S R T K G A V G E L L V S E W
181 GCTAATGCCAAAGGCCTCCGTGTGAAGAGGTCCGGGTCCAGCGAT
A N A K G L R V K R S G S S D
226 GCGGACCGCGTGATCAACGGGCATCGCATCGAGATCAAGATGTCG
A D R V I N G H R I E I K M S
271 ACTTTGTGGAAGTCCGGCGGCTTCAAGTTTCAGCAGATCCGGGAT
T L W K S G G F K F Q Q I R D
316 CAGGAGTACGACTTTTGCCTCTGCCTTGGGATCAGCCCGTTTCGAA
Q E Y D F C L C L G I S P F E
361 GTGCACGCGTGGCTGCTGCCCAAAGACCTATTGCTTGAGTACGTG
V H A W L L P K D L L E Y V
406 ATTGGTCACATGGGTCAGCACACCGGCGAGCGGGAGCGACACT
I G H M G Q H T G A S G S D T
451 GCGTGGCTGGGGTTCACAGCGGACGAGCCGTATGACTGGATGCGC
A W L G F P A D E P Y D W M R
496 CCTTTCGAGGTCGCTTAGGTCACGTCTGAAGATCTCCTCCTCGCG
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A G P G P Y

SEQ ID 7
SEQ ID 8

Fig. 7.

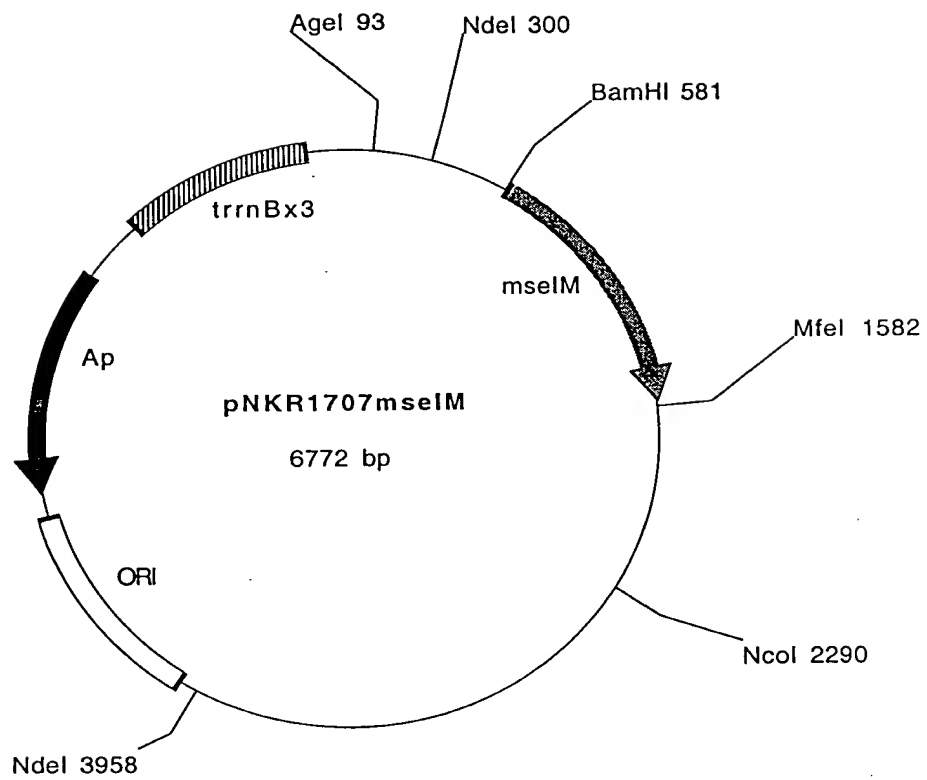
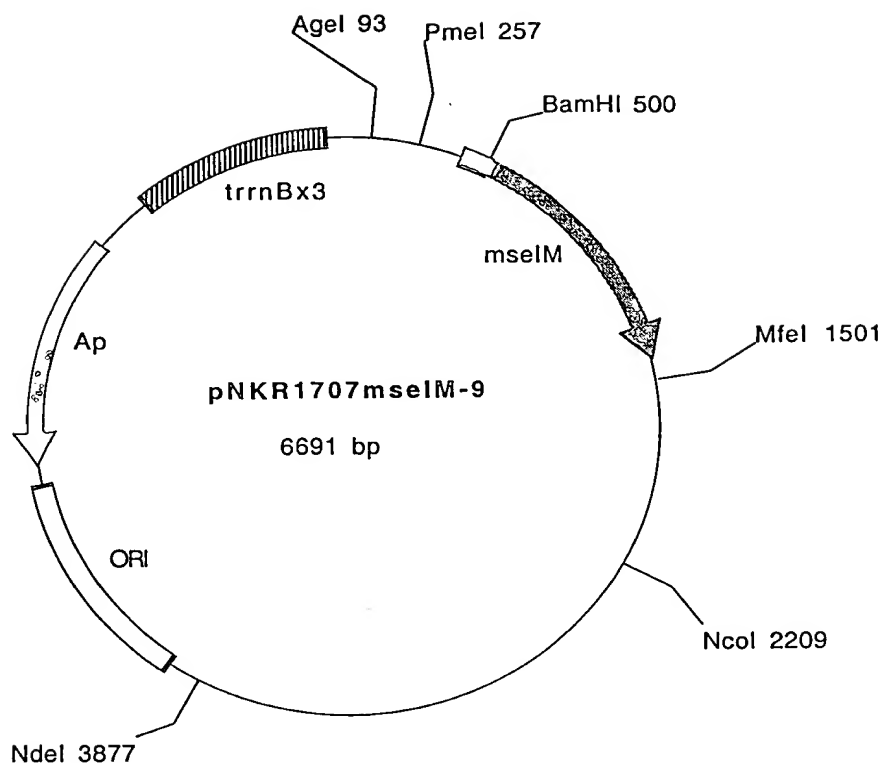


Fig. 8.

A.



B.

AgeI

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GACTATCCACATCTACCTTATTCCCCGAATAACGAGATCCCTTCCAGCACCGGGCAA

PmeI

TTGCCCCGTTTTTTTTTGC GTTGAATTTGTCATTTTGTGCCGTGGTGTTTAAACCGCAC
-35 -10

AGAATAAATGTCGTGATTTCACCTTTAAAATAAAAATTAAAAGAGAAAAAAATTCTCT
GTGGAAGGGCTATGTTAGATAAAATTGACCGTAAGCTGCTGGCCTTACTGCAGCAGGA
TTGCACCCTCTCTTTGCAGGCACTGGCTGAAGCCGTTAATCTGACAACCACCCCTTGC
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BamHI

TGGATCC

Fig. 9.

SEQ ID NO

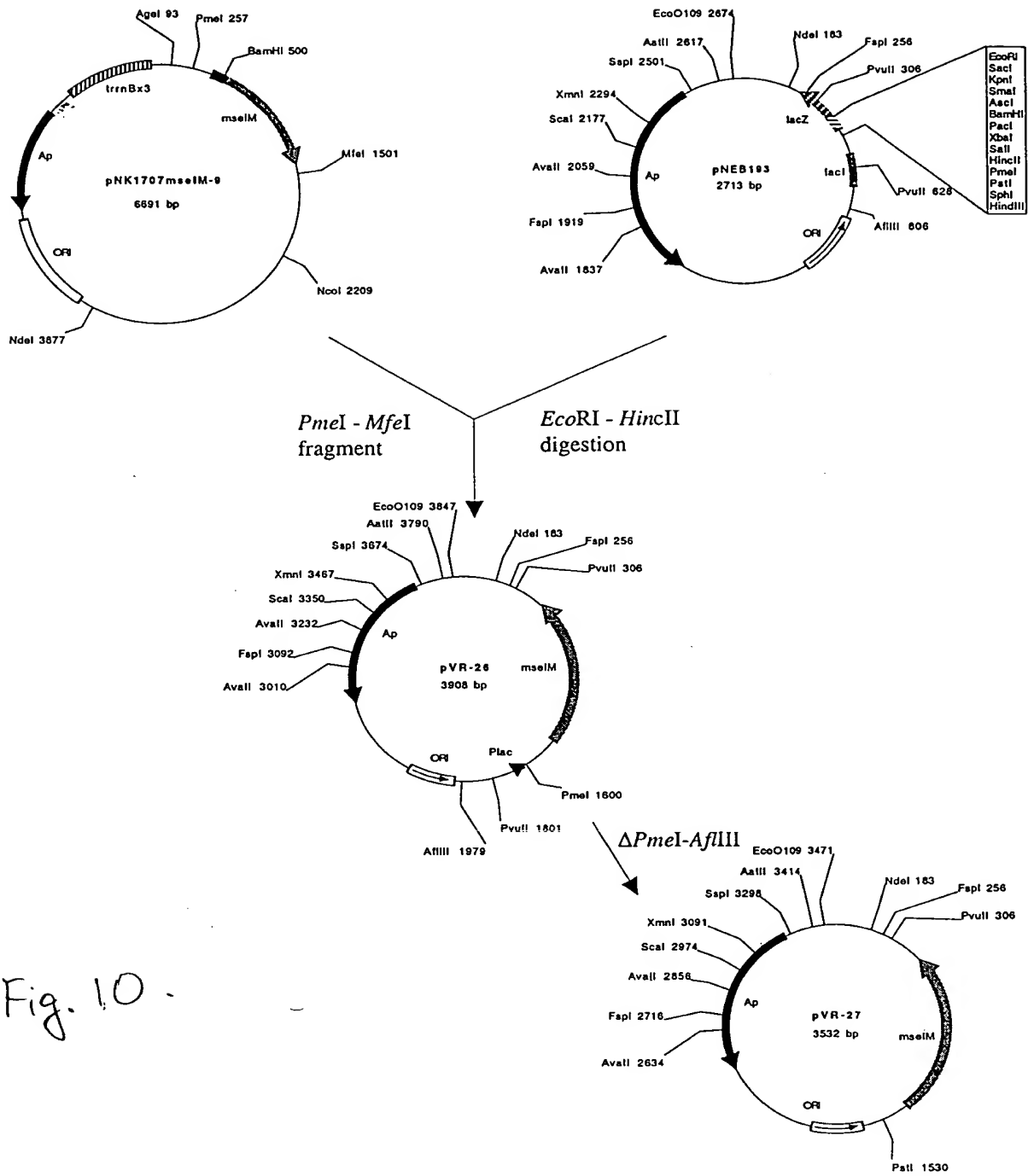


Fig. 10.

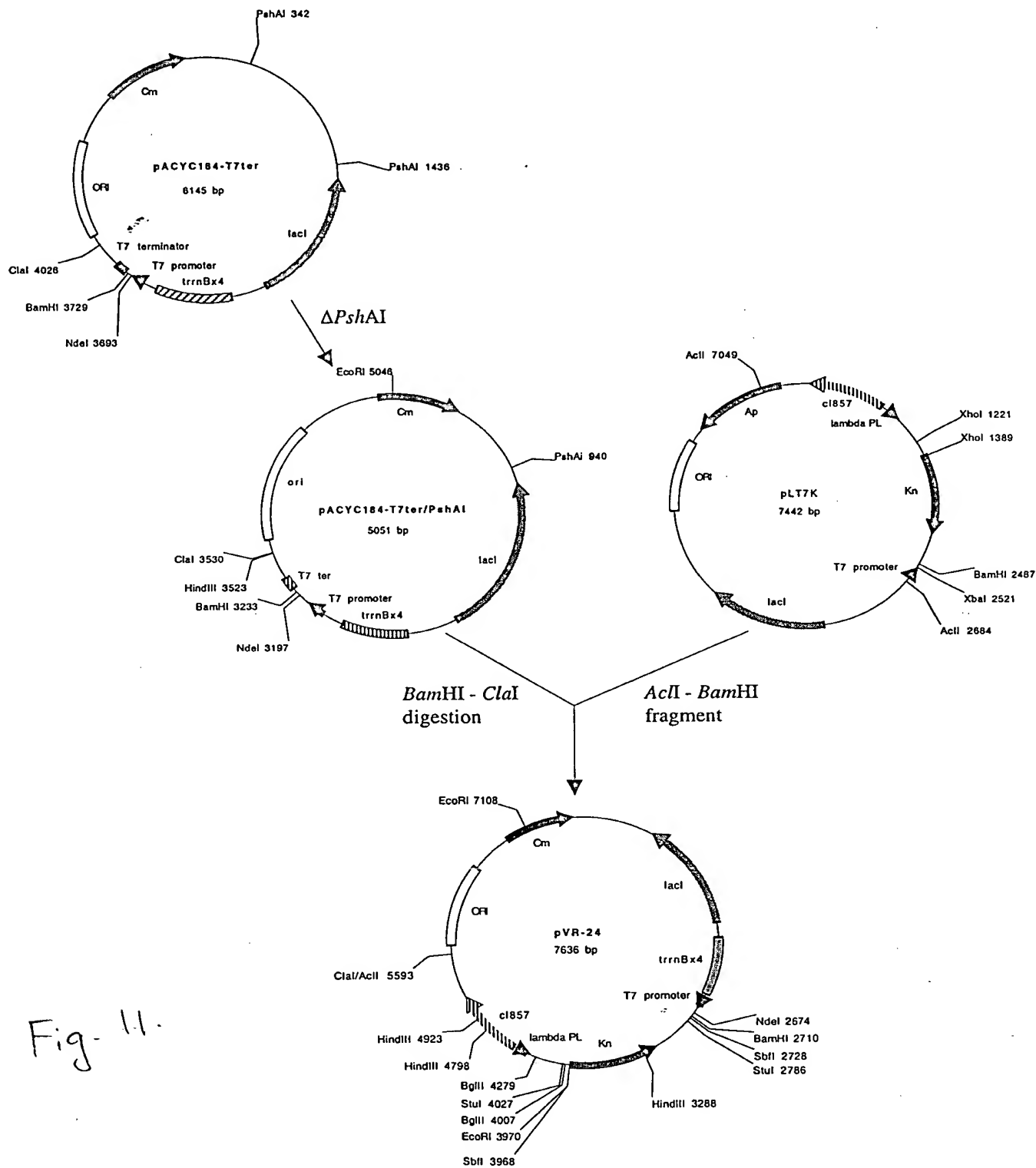
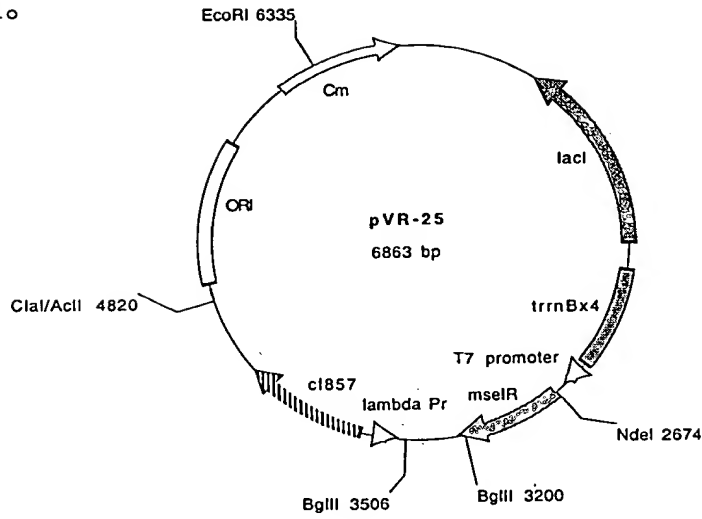


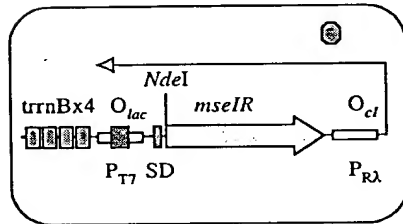
Fig. 11.

A.

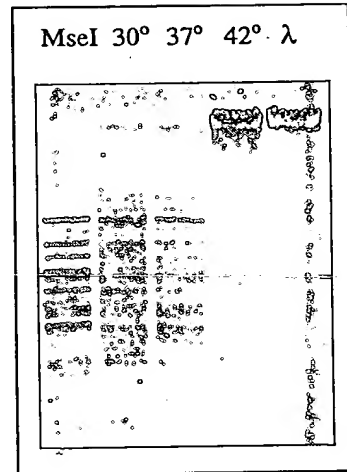
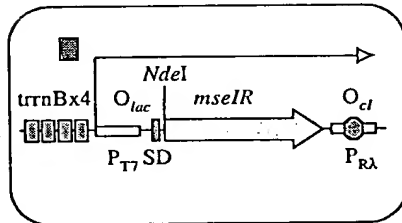


B.

42°C



30°C
IPTG



■ LacI
● CI₈₅₇

Fig. 12.

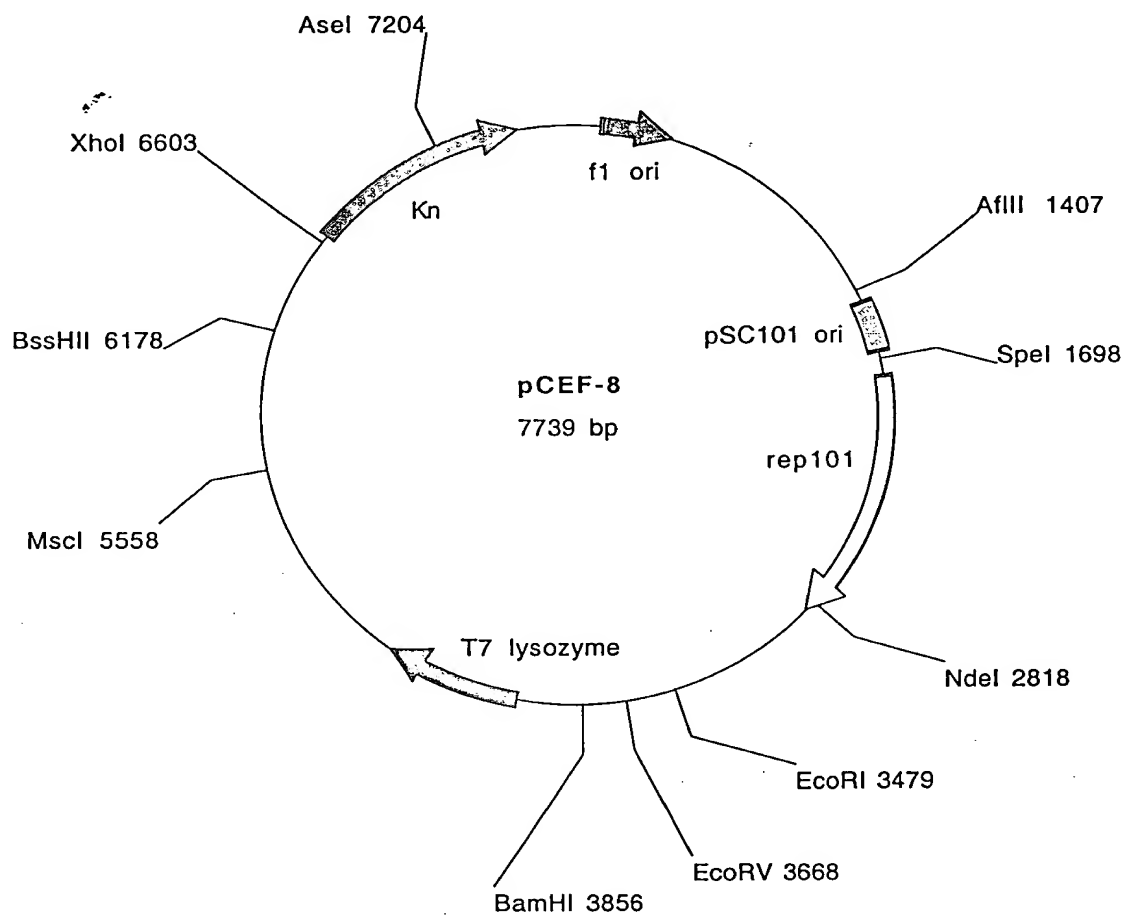


Fig. 13.

100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900 10000

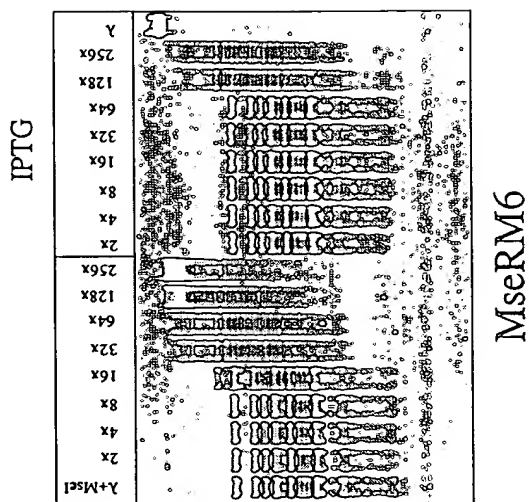
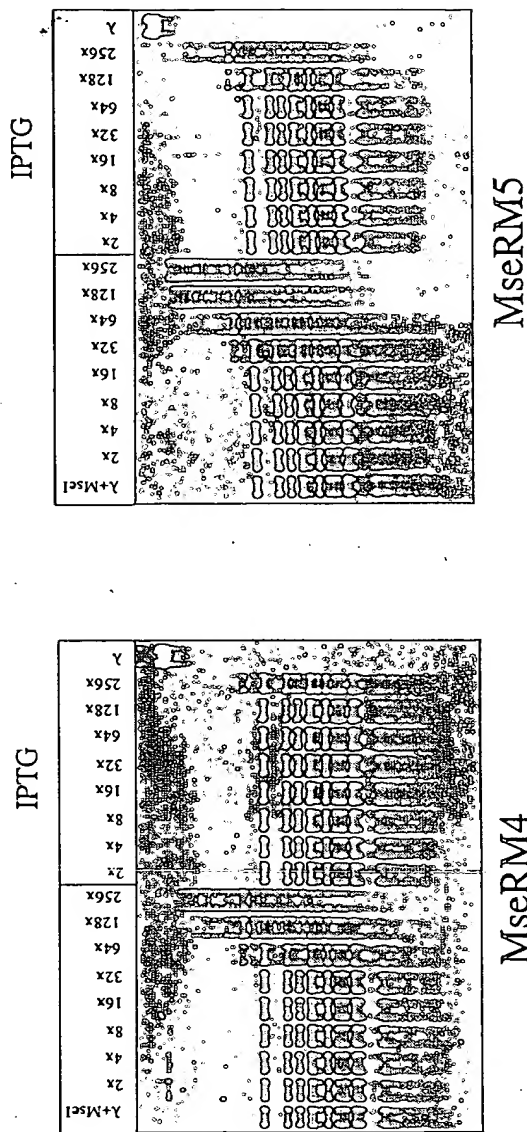


Fig. 14.

60000 50000 40000 30000 20000 10000 0

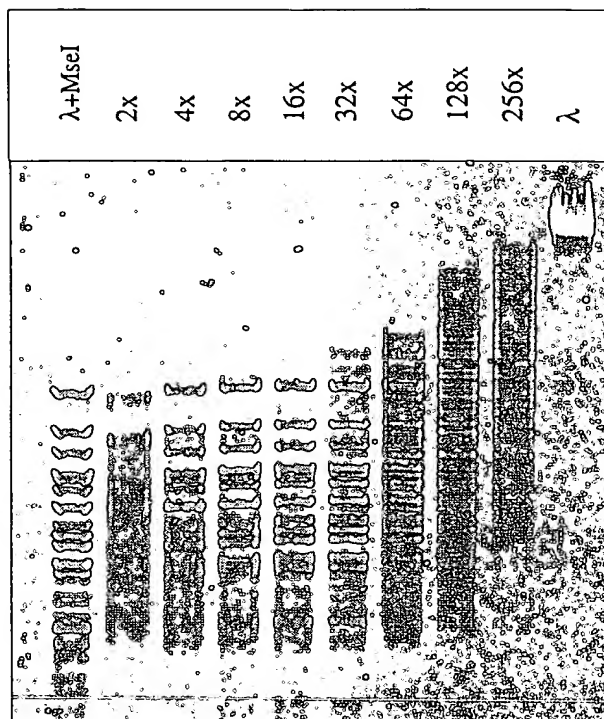


Fig.15.